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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/537,260	10/14/2005	Damien Bourgeois	RN02156	1421

7590 03/28/2008
Jean-Louis Seugnet
Rhodia
Intellectual Property Department
259 Prospect Plains CN 7500
Canbury, NJ 08512-7500

EXAMINER

SHIAO, REI TSANG

ART UNIT	PAPER NUMBER
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1626

MAIL DATE	DELIVERY MODE
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03/28/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.		Applicant(s)	
	10/537,260		BOURGEOIS ET AL.	
	Examiner		Art Unit	
	Rei-tsang Shiao, Ph.D.		1626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 January 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 25-48 is/are pending in the application.
- 4a) Of the above claim(s) 25-37 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 38-48 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This application claims benefit of the foreign application:
FRANCE 02/15115 with a filing date 12/02/2002.
2. Claims 25-48 are pending in the application.

Responses to Election/Restriction

3. Applicant's election with traverse of election of Group III claims 38-48, in part, in the reply filed on January 07, 2008 is acknowledged. The traversal is on the grounds that applicants assert that the Examiner need not have restricted the application, and M.P.E.P 803 is cited. This is found not persuasive, and the reasons are given *infra*.

Claims 25-48 are pending in the application. The scope of the invention of the elected subject matter is as follows.

Claims 38-48, in part, drawn to process of making (i.e., hydrocyanation of ethylenic nitrile compounds) in the presence of a catalyst system comprising compounds of formula (I), wherein the variable L of formula (I) represents a substituted or unsubstituted aromatic not having hetero atoms and one ring in fused form thereof.

The claims 25-48 herein lack unity of invention under PCT rule 13.1 and 13.2 since the compounds defined in the claims lack a significant structural element qualifying as the special technical feature that defines a contribution over the prior art, Soliman et al. CAS: 126:293386. Soliman et al. discloses similar organic compounds of formulae (I) –(IV), especially formula (IV), as the instant invention. Accordingly, unity of invention is considered to be lacking and restriction of the invention in accordance

Art Unit: 1626

with the rules of unity of invention is considered to be proper. Furthermore, even if unity of invention under 37 CFR 1.475(a) is not lacking, which it is lacking, under 37 CFR 1.475(b) a national stage application containing claims to different categories of invention will be considered to have unity of invention if the claims are drawn only to one of the following combinations:

- (1) A product and a process specially adapted for the manufacture of said product', or
- (2) A product and a process of use of said product; or
- (3) A product, a process specially adapted for the manufacture of the said product, and a use of the said product; or
- (4) A process and an apparatus or means specifically designed for carrying out the said process; or
- (5) A product, a process specially adapted for the manufacture of the said product, and an apparatus or means specifically designed for carrying out the said process.

And, according to 37 CFR 1.475(c)

if an application contains claims to more or less than one of the combinations of categories of invention set forth in paragraph (b), unity of invention might not be present.

However, it is noted that unity of invention is considered lacking under 37 CFR 1.475(a) and (b). Therefore, since the claims are drawn to more than a product, and according to 37 CFR 1.475 (e)

the determination whether a group of inventions is so linked as to form a single general inventive concept shall be made without regard to whether the inventions are claimed in separate claims or as alternatives within a single claim.

The claims lack unity of invention and should be limited to only a product, or a process for the preparation, or a use of the said product. In the instant case, Groups I-IV are drawn to various products and processes of making do not contain a common technical feature or structure of claims 25-48, and do not define a contribution over the

Art Unit: 1626

prior art, i.e., organic compounds of Soliman et al. CAS: 126:293386. Moreover, the examiner must perform a commercial database search on the subject matter of each group in addition to a paper search, which is quite burdensome to the examiner. Claims 38-48, in part, embraced in above elected subject matter, are prosecuted in the case. Claims 38-48, in part, not embraced in above elected subject matter, and claims 25-37 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention.

The requirement is still deemed proper.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 40 and 46 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 40 recites the limitation "the linear pentenenitrile", which is not found in the base claim. There is insufficient antecedent basis for this limitation in the claim. Moreover, in claim 40 or 46, i.e., see lines 2-4 of claim 40, the limitation "2-methyl-3-butenenitrile", "2-methyl-2-butenenitrile", "2-methylglutaronenitrile", "2-ethylsuccinonitrile", or "butadiene" are not linear pentenenitrile in the chemical art. Correction is required.

Double Patenting

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 38-48 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of Marion et al. co-pending application No. 10/544,953. Although the conflicting claims are not identical, they are not patentably distinct from each other and reasons are as follows.

Applicants claim processes of hydrocyannating an ethylenically unsaturated nitrile to dinitrile by reacting hydrogen cyanide in the presence of a catalyst system

comprising a transitional metal, an organic compound of formula (I) and an cocatalyst of Lewis acid, see claim 1.

Marion et al. '953 claim hydrocyannating processes of making dinitrile compounds by reacting mononitrile compounds with hydrogen cyanide in the presence of a catalyst system comprising an organometallic complex and an cocatalyst of Lewis acid.

The difference between the instant claims and Marion et al. is that Marion et al. is silent on the instant organic compounds of formula (I). Marion et al. processes inherently overlap the instant invention.

One having ordinary skill in the art would find the instant claims 38-48 prima facie obvious **because** one would be motivated to employ the hydrocyanation processes of Marion et al. to obtain the instant hydrocyanation process, wherein the organic compounds of formula (I) are use. Dependent claims 39-48 are also rejected along with claim 38 under the obviousness-type double patenting.

The motivation to obtain the claimed catalyst derives from known Marion et al. processes would possess similar yields to that which is claimed in the reference.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Objections

6. Claims 38-48 are objected to as containing non-elected subject matter, i.e., the variable L of formula (I) represents a substituted or unsubstituted aromatic having hetero atoms and one ring in fused form, etc. It is suggested that applicants

Art Unit: 1626

amend the claims to the scope of the elected subject matter as defined on pages 2-3 *supra*.

7. Claim 42-43 and 45 are objected to as containing typographic errors. In claim 42, line 4, a symbol "." is missing at the end of the claim. In claim 43, line 1, after the term "Lewis acid", a term "is" is missing. In claim 43, page 10, line 3, a term "chloride" is missing after the term "yttrium". In claim 45, line 3, a symbol "," is superfluous between the terms "butadiene" and "to pentenenitriles". Correction is required.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rei-tsang Shiao whose telephone number is (571) 272-0707. The examiner can normally be reached on 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph K. McKane can be reached on (571) 272-0699. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic

Art Unit: 1626

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/REI-TSANG SHIAO /

Rei-tsang Shiao, Ph.D.
Primary Patent Examiner
Art Unit 1626

March 17, 2008